

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-26. (Canceled)

27. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein the visco-elastic coupling layer (7.2) is formed as a mutual layer extending over the surface of all measured-value sensing elements (4.1.x) between the measured-value sensing elements (4.1.x) and the vehicle structure (5) or is embodied in form of separate nubs (7.2.1) between the measured-value sensing elements (4.1.x) and the vehicle structure (5).

28. (Currently amended) ~~A vehicle sensor according to claim 26,~~ A vehicle sensor (4) for detecting impact sound, the sensor comprising:

a measured-value sensor (4.1) for detecting the impact sound; and

multiple individual, separate measured-value sensing elements (4.1.x), each of which is coupled to a vehicle structure (5) in such a way that impact sound waves are transmitted by the vehicle structure (5) to the measured-value sensing elements (4.1.x), wherein the measured-value sensing elements (4.1.x) are coupled to the vehicle structure (5) by an elastic (7.1) or a visco-elastic (7.2) coupling layer for transmitting the impact sound waves wherein a matrix is arranged between the measured-value sensing elements (4.1.x) and the vehicle structure (5), the matrix having recesses between the measured-value sensing elements (4.1.x) and the vehicle structure (5), and the visco-elastic coupling layer (7.2) is embodied in form of fillings (7.2.3) of the recesses.

29. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein the measured value sensor is a piezoelectric, piezoresistive or capacitive sensor and the individual, separate measured-value sensing elements are arranged at the measured-value sensor as electrodes in form of a facet structure or of an array.

30. (Currently amended) ~~A vehicle sensor according to claim 26,~~ A vehicle sensor (4) for detecting impact sound, the sensor comprising:

a measured-value sensor (4.1) for detecting the impact sound; and

multiple individual, separate measured-value sensing elements (4.1.x), each of which is coupled to a vehicle structure (5) in such a way that impact sound waves are transmitted by the vehicle structure (5) to the measured-value sensing elements (4.1.x), wherein the measured-value sensing elements (4.1.x) are coupled to the vehicle structure (5) by an elastic (7.1) or a visco-elastic (7.2) coupling layer for transmitting the impact sound waves and the multiple individual, separate measured-value sensing elements comprise at least eight measured-value sensing elements (4.1.3, 4.1.4).

31. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein the measured-value sensing elements (4.1.5, 4.1.6) are arranged in form of a digital structure or of a self-testing structure.

32. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein dimensions of the measured-value sensing elements (4.1.x) are smaller than a smallest wave length to be detected of the impact sound.

33. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein dimensions of the measured-value sensing elements (4.1.x) are greater than a

greatest wave length to be detected of the impact sound.

34. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28 further comprising: a carrier (4.3) for the measured-value sensor (4.1), wherein the carrier is embodied as a substrate, a wiring carrier or a foil.
35. (Previously presented) A vehicle sensor according to claim 34, wherein the measured-value sensor (4.1) is connected to the carrier (4.3) via a force-fit and form-fit connection (4.8.1, 4.8.3).
36. (Previously presented) A vehicle sensor according to claim 35, wherein the form-fit connection (4.8.1, 4.8.3) between the measured-value sensor (4.1) and the carrier (4.3) is a glued spot or a contact layer.
37. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28 further comprising: an acceleration sensor (4.4).
38. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein the measured-value sensing elements (4.1.x) are coupled to the vehicle structure (5) via at least one mechanical contact point (11.1) for transmitting the impact sound waves.
39. (Previously presented) A vehicle sensor according to claim 38, wherein the mechanical contact point is cone shaped, the base area of the cone being circular or oval.
40. (Previously presented) A vehicle sensor according to claim 38, wherein distances between the mechanical contact points (11.1) are smaller than the smallest wave

length to be detected of the impact sound.

41. (Previously presented) A vehicle sensor according to claim 38, wherein distances between the mechanical contact points (11.1) are greater than the greatest wave length to be detected of the impact sound.
42. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein the vehicle sensor is used in conjunction with a safety device of a vehicle.
43. (Currently amended) A vehicle sensor according to ~~claim 26~~ claim 28, wherein the vehicle sensor is used in conjunction with a diagnostic device of a vehicle.
44. (Currently amended) ~~A vehicle sensor according to claim 26,~~ A vehicle sensor (4) for detecting impact sound, the sensor comprising:

a measured-value sensor (4.1) for detecting the impact sound; and

multiple individual, separate measured-value sensing elements (4.1.x), each of which is coupled to a vehicle structure (5) in such a way that impact sound waves are transmitted by the vehicle structure (5) to the measured-value sensing elements (4.1.x), wherein the measured-value sensing elements (4.1.x) are coupled to the vehicle structure (5) by an elastic (7.1) or a visco-elastic (7.2) coupling layer for transmitting the impact sound waves wherein the vehicle sensor is provided in a vehicle for evaluating superimposed impact sound waves, which are independent from each other or for differentiating between superimposed impact sound waves, which are independent from each other, as a variable band pass and/or effective value creator or as a parameter estimator or for the determination of statistic characteristics.